SAMPLING PROTOCOLS

Waste Samples from Productions Facilities (Poultry Houses)

A total of 18 samples of waste will be collected from each house. The samples will be collected at regular intervals covering the total length of the facility using a zigzag pattern. Both litter and cake samples will be collected. A steel spade will be used to collect the samples and place them in a plastic bag contained inside a 5 gallon bucket. After collection of all the samples, the bag and bucket will be sealed. All sampling equipment and reusable personnel equipment will be decontaminated using water, phosphate free soap and 6 percent bleach.

Soil Samples from Waste Applied Fields

Equipment and personnel will be transported to the field in a truck or van. At each field between one and four sampling areas will be identified. Each of the sampling areas will be between one and ten acres in size. At each sampling area, a regular grid pattern of 20 sample locations will be established. At each of the 20 sampling locations, individual soil samples will be collected at three depths: 0 to 2 inches, 2 to 4 inches, and 4 to 6 inches. Individual samples will be placed in plastic bags with labels. All sampling equipment and reusable personnel equipment will be decontaminated between fields using water, phosphate free soap and 6 percent bleach.

Rainfall Runoff Samples

At or near the edge of fields where waste has been applied, rainfall runoff sampling locations will be selected. These locations will typically be low or sloped areas where water will runoff or accumulate. Where runoff water accumulates in a natural depression, the water may be sampled directly from these locations.

Groundwater Samples

Samples of groundwater will be collected using a hydraulic pushed sampling device (probe) mounted on the back of a van or truck. The small diameter probe (usually about two inches in diameter) will be pushed into the subsurface at selected locations on or near the edge of fields where waste has been applied. Groundwater will be collected using a small pump or by inserting a small tube inside the probe. At selected locations (up to three per field), a plastic pipe will be placed in the probe hole to allow repeated sampling of the groundwater. To stabilize the pipe, a small concrete pad will be placed around and over the pipe. If requested by the owner, the pad and pipe will be flush with the ground surface. If the probe cannot penetrate the subsurface, an auger drilling rig may be used. Upon completion the ground will be restored to preexisting condition. Grab sample method will be used to gather data from existing wells or springs using scientifically accepted collection procedures.

Exhibit # 1